Chevron Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

GAS OIL

PRODUCT NUMBER(S): CPS279990

COMPANY IDENTIFICATION

Chevron Products Company
575 Market St.
San Francisco, CA 94105-2856

EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (800)231-0623 or
(510)231-0623 (International)
TRANSPORTATION (24 hr): CHEMTREC
(800)424-9300 or (703)527-3887
Emergency Information Centers
are located in U.S.A.
Int'l collect calls accepted

PRODUCT INFORMATION: (800)689-3998 MSDS Requests and Technical

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % GAS OIL

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
DIESEL FUEL NO. 2 Chemical Name: FUELS, DIESEL, NO. 2 CAS68476346	100.00%	NONE	NA
POTENTIALLY			
INCLUDING			
HDS DISTILLATE, MIDDLE Chemical Name: DISTILLATES, HYDRODESULFURIZED MIDDLE CAS64742809		NONE	NA

GAS OIL, LIGHT
Chemical Name: DISTILLATES, STRAIGHT RUN MIDDLE
CAS64741442 NONE NA

KEROSENE
Chemical Name: KEROSINE
CAS8008206 NONE NA

HYDRODESULFURIZED KEROSINE
Chemical Name: KEROSINE, HYDRODESULFURIZED
CAS64742810 NONE NA

CAT CRACKED DISTILLATE, LIGHT
Chemical Name: DISTILLATES, LIGHT CATALYTIC CRACKED
CAS64741599 NONE NA

TOTAL SULFUR, MASS %
< 0.50%

COMPOSITION COMMENT:
All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

3. HAZARDS IDENTIFICATION

********** **EMERGENCY OVERVIEW** **********

Red liquid.

- **COMBUSTIBLE**
- **HARMFUL OR FATAL IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE**
- **CAUSES SKIN IRRITATION**
- **POSSIBLE CANCER HAZARD**
- **MAY CAUSE CANCER BASED ON ANIMAL DATA**

****

IMMEDIATE HEALTH EFFECTS
EYE:
Not expected to cause prolonged or significant eye irritation.
SKIN:
Contact with the skin causes irritation. Not expected to be harmful to internal organs if absorbed through the skin.
INGESTION:
Not expected to be harmful if swallowed. Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.

INHALATION:

Prolonged breathing of vapors can cause central nervous system effects.

SIGNS AND SYMPTOMS OF EXPOSURE:

INHALATION: Central nervous system effects may include one or more of following: headache, dizziness, loss of appetite, weakness and loss of coordination. Skin injury: may include pain, discoloration, swelling, and blistering.

CARCINOGENICITY:

This product contains a mixture of petroleum hydrocarbons called middle distillates (which means they boil between approximately 350F and 700F). Because of this broad description, many products are considered middle distillates yet they are produced by a variety of different petroleum refining processes. Toxicology data developed on some middle distillates found that they caused positive responses in some mutagenicity tests and caused skin cancer when repeatedly applied to mice over their lifetime. This product may contain some middle distillates found to cause those adverse effects.

---

4. FIRST AID MEASURES

EYE:

No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.

SKIN:

Wash skin immediately with soap and water and remove contaminated clothing and shoes. Get medical attention if irritation persists. Discard contaminated clothing and shoes or thoroughly clean before reuse.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

INHALATION:

Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms continue.

NOTE TO PHYSICIANS:

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

---

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: (P-M) 125F (52C) Min.
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: 0.6 Upper: 4.7

EXTINGUISHING MEDIA:
CO2, Dry Chemical, Foam and Water Fog.
NFPA RATINGS: Health 0; Flammability 2; Reactivity 0.

Revision Number: 9 **Revision Date: 06/30/99** **MSDS Number: 002740**

FIRE FIGHTING INSTRUCTIONS:
For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (703)527-3887
International Collect Calls Accepted
ACCIDENTAL RELEASE MEASURES:
Eliminate all sources of ignition in vicinity of released gas.

Clean up spills immediately, observing precautions in Exposure Controls/ Personal Protection section. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material. Release of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

7. HANDLING AND STORAGE

Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85F.

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed. DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor or liquid. Avoid contact with eyes, skin, and clothing. WARNING! Do not use as portable heater or appliance fuel. Toxic fumes may accumulate and cause death.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Revision Number: 9 Revision Date: 06/30/99 MSDS Number: 002740

GENERAL CONSIDERATIONS:

ENGINEERING CONTROLS
Use closed system where possible to avoid eye and skin exposure.

PERSONAL PROTECTIVE EQUIPMENT
EYE/FACE PROTECTION:
No eye protection is normally required.
SKIN PROTECTION:
Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include:
RESPIRATORY PROTECTION:
If user operations generate harmful levels of airborne material that is not adequately controlled by ventilation, wear a NIOSH approved respirator that provides adequate protection. Use the following elements for air-purifying respirators: However, if operating conditions create high airborne concentrations, the use of an approved respirator is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:
Red liquid.

pH:	NDA
VAPOR PRESSURE:	0.04 PSIA @ 40C
VAPOR DENSITY (AIR=1):	NDA
BOILING POINT:	176 - 370C (348-698F)
FREEZING POINT:	NDA
MELTING POINT:	NA
SOLUBILITY:	Soluble in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY:	0.84 @ 15.6/15.6C (Typical)
VISCOSITY:	1.9 cSt @ 40C (Min.)

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
NDA.
CHEMICAL STABILITY:
Stable.
CONDITIONS TO AVOID:
No data available.
INCOMPATIBILITY WITH OTHER MATERIALS:
May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
HAZARDOUS POLYMERIZATION:
Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
Minimal effects clearing in less than 24 hours.
SKIN EFFECTS:
Moderate irritation at 72 hours. (Moderate erythema). The acute dermal LD50 in rats > 2000 mg/kg based on data for a similar material. This material was not a skin sensitizer in the Buehler Guinea Pig Sensitization Test.
ACUTE ORAL EFFECTS:
The oral LD50 in rats is > 5 ml/kg.
ACUTE INHALATION EFFECTS:
The 1-hour inhalation LC50 in female rats is 5 mg/l.

The data above is obtained from studies sponsored by the American Petroleum Institute.
ADDITIONAL TOXICOLOGY INFORMATION:
This product contains kerosene. CONCAWE (product dossier 94/106) has summarized current health, safety and environmental data available for a number of kerosenes (typically straight-run kerosene, CAS 8008-20-6, or hydrodesulfurized kerosene, CAS 64742-81-0). Following acute exposure to kerosene, signs observed in rats and rabbits were of a low order of toxicity: central nervous system depression occurred following oral exposure, skin irritation (ranging from slight to severe irritation) occurred with dermal exposure, and respiratory tract irritation occurred with inhalation exposure. None of the kerosenes tested produced more than slight eye irritation and none were skin sensitizers. However, intratracheal administration or artificial aspiration of small volumes (0.1 to 0.2 ml) of kerosene into the lungs of rats, chickens and primates resulted in lung damage and/or death. Chronic (3 to 24 months) mouse dermal toxicity studies of kerosenes and jet fuels produced mild to moderate skin irritation, while long-term (2+ years) studies showed moderate to severe skin damage as well as an increased incidence of tumors after long latency periods (probably due to a secondary mechanism related to skin irritancy). In a study in which rats, mice, rabbits and cats were exposed to kerosene aerosol concentrations in the range 0.05 to 120 mg/l for up to four weeks, reductions in respiratory rate, pulmonary hyperaemia, leucocytosis, monocytosis and decreased erythrocyte sedimentation rate were observed, and histological examination revealed inflammatory changes in the respiratory tract (tracheitis, bronchitis and pneumonia).

Hydrodesulfurized kerosene was tested by the Petroleum Product Stewardship Council in a OECD Guideline 421 Reproductive/Developmental Toxicity Study. The kerosene sample was diluted to 494 (60%), 330 (40%), and 165 (20%) mg/kg/day in food grade mineral oil and applied daily during pre-mating and mating to day 19 of gestation. There was no apparent maternal, reproductive, or developmental toxicity at any dose. Males treated for eight weeks had increased relative kidney weights in the high dose group but no microscopic changes in testes or epididymides. No gross anomalies were observed in the pups.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:
The 96-hour LC50 for the polychaete worm Nereis Vexillosa is >8.19 mg/l. The 48-hour LC50 for mysid shrimp (Mysidopsis almyra) is 0.9 mg/l. The 96-hour LC50 in inland silverside minnow (Menidia beryllina) is 3.9 mg/l. The 96-hour LC50 for pink salmon (Oncorhynchus gorbuscha) is 0.97 mg/l. The 96-hour LC50 for the edible mussel (Mytilus edulis) is >4.19 mg/l.
ENVIRONMENTAL FATE:
No data available.

13. DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by USEPA under RCRA (40CFR261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: GAS OIL
DOT HAZARD CLASS: COMBUSTIBLE LIQUID
DOT IDENTIFICATION NUMBER: UN1202
DOT PACKING GROUP: III

15. REGULATORY INFORMATION

SARA 311 CATEGORIES:
1. Immediate (Acute) Health Effects: YES
2. Delayed (Chronic) Health Effects: YES
3. Fire Hazard: YES
4. Sudden Release of Pressure Hazard: NO

5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)

Revision Number: 9 **Revision Date: 06/30/99** **MSDS Number: 002740**

04=CA Prop 65-Carcin 14=ACGIH TWA 25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox 15=ACGIH STEL 26=TSCA Sect 8(d)
06=IARC Group 1 16=ACGIH Calc TLV 27=TSCA Sect 4(a)
07=IARC Group 2A 17=OSHA PEL 28=Canadian WHMIS
08=IARC Group 2B 18=DOT Marine Pollutant 29=OSHA CEILING
09=SARA 302/304 19=Chevron TWA 30=Chevron STEL
10=PA RTK 20=EPA Carcinogen

The following components of this material are found on the regulatory lists indicated.

KEROSINE
is found on lists: 02,10,11,

---

16. OTHER INFORMATION

NFPA RATINGS: Health 0; Flammability 2; Reactivity 0;
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:
Changes have been made throughout this Material Safety Data Sheet.
Please read the entire document.
See MSDS 6894 for Diesel Fuel No.2, and MSDS 7098 for CARB Diesel Fuel No.2.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	- Threshold Limit Value	TWA	- Time Weighted Average
STEL	- Short-term Exposure Limit	TPQ	- Threshold Planning Quantity
RQ	- Reportable Quantity	PEL	- Permissible Exposure Limit
C	- Ceiling Limit	CAS	- Chemical Abstract Service Number
A1-5	- Appendix A Categories	()	- Change Has Been Proposed
NDA	- No Data Available	NA	- Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

****

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibil-

ity for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Revision Number: 9 Revision Date: 06/30/99 MSDS Number: 002740

****

THIS IS THE LAST PAGE OF THIS MSDS

****